What is claimed:

1. The method of manufacturing an adhesive bonded sintered plate, comprising the steps of

   - cleaning metal cores of irregularities;
   - roughening a surface of said metal cores to prepare said metal cores for bonding;
   - applying thermosetting adhesive layers to said metal cores;
   - applying sintered linings to said thermosetting adhesive layers;
   - bonding said sintered linings to said thermosetting adhesive layers and said metal cores at a bonding pressure, bonding temperature and a bonding time.

2. The method of claim 1, wherein said thermosetting adhesive is a phenolic thermosetting adhesive.

3. The method of claim 1, wherein said thermosetting adhesive is an epoxy thermosetting adhesive.

4. The method of claim 1, wherein said metal cores are fabricated from aluminum.

5. The method of claim 1, wherein said bonding pressure is in the range of 25 to 1000 psi.

6. The method of claim 1, wherein said bonding temperature is in the range of 375 degrees Fahrenheit to 475 degrees Fahrenheit.

7. The method of claim 1, wherein said bonding time is at least 30 seconds.

8. The method of manufacturing an adhesive bonded sintered plate, comprising the steps of

- cleaning metal cores of irregularities;
- roughening a surface of said metal cores to prepare said metal cores for bonding;
- applying thermosetting adhesive layers to said metal cores;
- applying sintered linings to said thermosetting adhesive layers;
- bonding said sintered linings to said thermosetting adhesive layers and said metal cores at a bonding pressure, bonding temperature and a bonding time, wherein
    a. said bonding pressure is in the range of 25 to 1000 psi;
    b. said bonding temperature is in the range of 375 degrees Fahrenheit to 475 degrees Fahrenheit;
    c. said bonding time is at least 30 seconds.

9. The method of claim 8, wherein said thermosetting adhesive is a phenolic thermosetting adhesive.

10. The method of claim 8, wherein said thermosetting adhesive is an epoxy thermosetting adhesive.

11. The method of claim 8, wherein said metal cores are fabricated from aluminum.

12. An adhesive bonded sintered plate comprising
- a top sintered layer;
- a bottom sintered layer;
- a top adhesive layer;
- a bottom adhesive layer;
- a metal core layer;

SUB Q7

wherein said top sintered layer is attached to said metal core layer using said top adhesive layer and said bottom sintered layer is attached to said metal core layer using said bottom adhesive layer.

13. The adhesive bonded sintered plate of claim 12, wherein said top adhesive layer and said bottom adhesive layer comprise thermosetting phenolic adhesive.

14. The adhesive bonded sintered plate of claim 12, wherein said top adhesive layer and said bottom adhesive layer comprise thermosetting epoxy adhesive.

15. The adhesive bonded sintered plate of claim 12, wherein said top sintered layer is attached to said metal core layer and said bottom sintered layer is attached to said metal core layer at a bonding temperature, bonding pressure, and a bonding time.

16. The adhesive bonded sintered plate of claim 15, wherein said bonding pressure is in the range of 25 to 1000 psi.

17. The adhesive bonded sintered plate of claim 15, wherein said bonding temperature is in the range of 375 degrees Fahrenheit to 475 degrees Fahrenheit.

18. The adhesive bonded sintered plate of claim 15, wherein said bonding time is at least 30 seconds.

19. The adhesive bonded sintered plate of claim 12, wherein said metal core layer comprises aluminum.

20. An adhesive bonded sintered plate comprising

- a top sintered layer;
- a bottom sintered layer;
- a top adhesive layer;
- a bottom adhesive layer;

- a metal core layer;

wherein said top sintered layer is attached to said metal core layer using said top adhesive layer and said bottom sintered layer is attached to said metal core layer using said bottom adhesive layer;

wherein said top sintered layer is attached to said metal core layer and said bottom sintered layer is attached to said metal core layer at a bonding temperature, bonding pressure, and a bonding time, wherein

a. said bonding pressure is in the range of 25 to 1000 psi;

b. said bonding temperature is in the range of 375 degrees Fahrenheit to 475 degrees Fahrenheit;

c. said bonding time is at least 30 seconds.

21. The adhesive bonded sintered plate of claim 20, wherein said metal core layer comprises aluminum.

22. The adhesive bonded sintered plate of claim 20, wherein said top adhesive layer and said bottom adhesive layer comprise thermosetting phenolic adhesive.

23. The adhesive bonded sintered plate of claim 20, wherein said top adhesive layer and said bottom adhesive layer comprise thermosetting epoxy adhesive.